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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,525	11/29/2001	Erlinda M. Gordon	EPE1110-1	6086

7590

10/22/2002

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EXAMINER

CHEN, LIPING

ART UNIT

PAPER NUMBER

1632

DATE MAILED: 10/22/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/997,525

Applicant(s)

GORDON ET AL.

Examiner

Liping Chen

Art Unit

1632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-22 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

*Election/Restriction*

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-5, 7-10, drawn to a targeted retroviral vector particle comprising a modified viral surface protein for targeting the extracellular matrix coagulation factor and a cytokine gene, a pharmaceutical composition comprising the targeted retroviral vector, and a method for inhibiting cancer in a subject using the pharmaceutical composition, classified in 424, subclass 93.2.
- II. Claims 1, 2 and 6-10, drawn to a targeted retroviral vector particle comprising a modified viral surface protein for targeting tumor vasculature and a cytokine gene, a pharmaceutical composition comprising the targeted retroviral vector, and a method for inhibiting cancer in a subject using the pharmaceutical composition, classified in 424, subclass 93.2.
- III. Claims 11-22, drawn to a pharmaceutical composition comprising two targeted retroviral vector particle comprising a modified viral surface protein for targeting the vector, one vector further comprising a cytokine gene, the second vector further a cytotoxic gene, and a method for inhibiting cancer in a subject using the pharmaceutical composition, classified in class 424, subclass 93.2.

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In addition, upon the election of group I-III, further election of the following patentable distinct species for the claimed invention is required:

IL-1, TNF, IL-2, IFN- $\gamma$ , IL-4, IL-7, or GM-CSF.

Upon the election of group III, further election of the following patentable distinct species for the claimed invention is required:

Tumor suppressor genes, thymidine kinases or mutated cyclin genes.

The inventions are distinct, each from the other because:

Groups I-III are distinct from each other because they are drawn to compositions having different chemical structures, physical properties and biological functions: viral surface protein for targeting the extracellular matrix (Groups I and III) or viral surface protein for targeting tumor vasculature (Group II), cytokine (Groups I-III) or cytotoxic gene (Group III), respectively, which require separate search. Search for viral surface protein for targeting the extracellular matrix does not require search for viral surface protein for targeting tumor vasculature, and vice versa; search for cytokine gene does not require search for cytotoxic gene, and vice versa. Further, Groups I-III are distinct from each other because they are drawn to materially different methods. Besides using compositions having different chemical structures, physical properties and biological functions in the methods, these methods differ at least in objectives, method steps, reagents

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and/or dosages, and/or schedules used, response variables, and criteria for success.

Since the search for each group would not be coextensive, the methods differ at the reasons described above, they are not obvious variants and deemed patentably distinct.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their recognized divergent subject matter, and the search required for any group is not required for remaining groups, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143.)

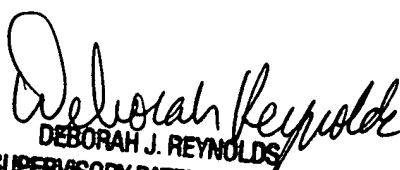
Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Liping Chen, whose telephone number is (703) 305-4842. The examiner can normally be reached on Monday through Friday from 8:00 to 5:00 (Eastern Standard Time). Should the examiner be unavailable, inquiries should be directed to Deborah Reynolds, Supervisory Primary Examiner of Art Unit 1632, at (703) 305-4051. Any administrative or procedural questions should be directed to Pauline Farrier, Patent Analyst, at (703) 305-3550. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Fax Center number is (703) 308-8724.

The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 1632.

Liping Chen, Ph.D.  
Patent Examiner  
Group 1632

  
DEBORAH J. REYNOLDS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600